

**ABSTRACT**

By employing easy determination logic, the amount of communication required for broadcasting and relaying is effectively reduced, and the message transmission efficiency is improved. A mobile terminal T2 includes determination logic. According to this logic, when a message is issued, via an arbitrary terminal, by a transmission source terminal T0 to a relay terminal T1, and the message is relayed by the relay terminal T1 to the terminal T2, the terminal T2 calculates an information progress vector I, which indicates the direction in which information progresses, and a terminal progress vector M, which indicates the direction in which the terminal T2 progresses. Then, the terminal T2 obtains an inner product  $\cos\theta$  for which the information progress vector I and the terminal progress vector M are standardized, and forwards the received message when the condition  $\cos\theta \geq 0$  is established.